A draft de novo genome sequence of *Asclepias tuberosa*

Plant genetic engineering relies heavily on genes sourced from other organisms to introduce desirable traits to target species. As only a minute portion of all plant species have had their genomes sequenced, there are undoubtedly beneficial genes in existence that are as-of-yet unknown to science simply because they have not yet been found. We set out to create a *de novo* gene sequence of a North Carolina native plant species as native plants are likely to have evolved traits to fit the environment of the state, which could be extracted and used to adapt crops to the conditions of North Carolina. We selected butterfly weed (*Asclepias tuberosa*) for this process, as it resides in the clade Asterids, in which multiple economically important crops to the state reside.